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NEWS 22 DEC 01 CAS REGISTRY updated with new ambiguity codes  
NEWS 23 DEC 11 CAS REGISTRY chemical nomenclature enhanced  
NEWS 24 DEC 14 WPIDS/WPINDEX/WPIX manual codes updated  
NEWS 25 DEC 14 GBFULL and FRFULL enhanced with IPC 8 features and  
functionality  
NEWS 26 DEC 18 CA/CAplus pre-1967 chemical substance index entries enhanced  
with preparation role  
NEWS 27 DEC 18 CA/CAplus patent kind codes updated  
NEWS 28 DEC 18 MARPAT to CA/CAplus accession number crossover limit increased  
to 50,000  
NEWS 29 DEC 18 MEDLINE updated in preparation for 2007 reload  
NEWS 30 DEC 27 CA/CAplus enhanced with more pre-1907 records  
  
NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.  
  
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McIntosh

11/294,932

\* \* \* \* \* STN Columbus \* \* \* \* \*

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TOTAL

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DICTIONARY FILE UPDATES: 2 JAN 2007 HIGHEST RN 916646-22-5

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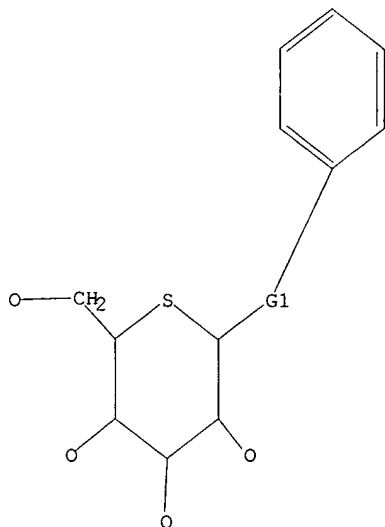
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L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 O,NH

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss sam

SAMPLE SEARCH INITIATED 12:56:12 FILE 'REGISTRY'

McIntosh

11/294,932

SAMPLE SCREEN SEARCH COMPLETED - 19 TO ITERATE

100.0% PROCESSED 19 ITERATIONS 8 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 119 TO 641  
PROJECTED ANSWERS: 8 TO 329

L2 8 SEA SSS SAM L1

=> s l1 full  
FULL SEARCH INITIATED 12:56:23 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 412 TO ITERATE

100.0% PROCESSED 412 ITERATIONS 195 ANSWERS  
SEARCH TIME: 00.00.01

L3 195 SEA SSS FUL L1

=> file caplus  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
ENTRY SESSION  
FULL ESTIMATED COST 172.10 172.31

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<http://www.cas.org/infopolicy.html>

=> s l3  
L4 11 L3

=> d bib abs 1-11 14

L4 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2006:1278776 CAPLUS  
TI Preparation of A crystals of 2'-(4'-ethylbenzyl)phenyl  
5-thio- $\beta$ -D-glucopyranoside  
IN Sato, Masakazu; Kakinuma, Hiroyuki; Asanuma, Hajime; Amada, Hideaki;  
Shinohara, Toshie  
PA Taisho Pharmaceutical Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 13pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

|      | PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|------|--|------|----------|-----------------|----------|
| PI   | JP 2006328055  | A    | 20061207 | JP 2006-120527  | 20060425 |
| PRAI | JP 2005-130453   | A    | 20050427 |                 |          |
| AB   | Title compound (I) having (a) peaks at $2\theta = 7.3, 13.2, 19.2$ , and $21.8^\circ$ by the powder x-ray diffraction X (Cu-K $\alpha$ ), (b) IR absorption peaks at 1492, 1238, 832, and 742 cm $^{-1}$ , and/or (c) DSC exothermic peak at 117-123 $^\circ$ and endothermic peak at 157-163 $^\circ$ |      |          |                 |          |

McIntosh

is prepared by (i) dissolving I in organic solvent-water mixture, crystallization at 5-40°, and drying the resulting crystals at 0-65°, or by (ii) suspending I in water (and organic solvent), retaining at 5-30°, and drying the crystals at 0-65°. Thus, I was dissolved in 1:1 EtOH-water mixture at 80°, treated with water, filtered, and dried at 50° in vacuo to give A crystals, which showed good stability at room temperature 75% RH for 4 wk.

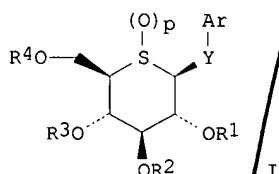
L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2006:1278775 CAPLUS  
 TI Preparation of C crystals of 2'-(4'-ethylbenzyl)phenyl  
 5-thio-β-D-glucopyranoside  
 IN Koizumi, Narumi; Shinohara, Toshie  
 PA Taisho Pharmaceutical Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 12pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

|      | PATENT NO.     | KIND | DATE     | APPLICATION NO. | DATE     |
|------|----------------|------|----------|-----------------|----------|
| PI   | JP 2006328054  | A    | 20061207 | JP 2006-120515  | 20060425 |
| PRAI | JP 2005-130454 | A    | 20050427 |                 |          |

AB Title compound (I) having (a) peaks at 2θ = 8.1, 12.8, 19.6, and 23.4° by the powder x-ray diffraction X (Cu-Kα), (b) IR absorption peaks at 1490, 1233, 840, and 745 cm<sup>-1</sup>, (c) DSC endothermic peak at 157-163°, and/or (d) m.p. 157°-163° is prepared by dissolving I in organic solvent-water mixture, crystallization, and drying the crystals at ≥65°. Thus, I was dissolved in aqueous EtOH, cooled, filtered, and dried at 140° for 3 h to give C crystals, which showed good stability in a sealed container at 40° for 1 mo and higher water solubility than B' crystals.

L4 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2005:1001014 CAPLUS  
 DN 143:279419  
 TI Inhibitor of sodium-dependent glucose transporter 2  
 IN Sato, Masakazu; Kakinuma, Hiroyuki; Asanuma, Hajime  
 PA Taisho Pharmaceutical Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 70 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

|      | PATENT NO.        | KIND | DATE     | APPLICATION NO. | DATE     |
|------|-------------------|------|----------|-----------------|----------|
| PI   | JP 2005247834     | A    | 20050915 | JP 2005-26180   | 20050202 |
| PRAI | JP 2004-27413     | A    | 20040204 |                 |          |
| OS   | MARPAT 143:279419 |      |          |                 |          |
| GI   |                   |      |          |                 |          |



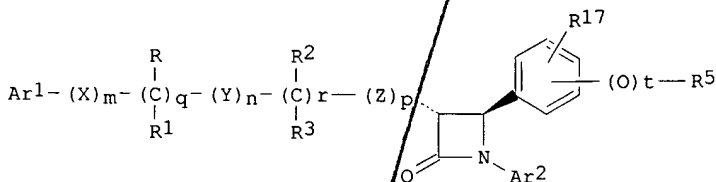
AB The antidiabetic medicines containing 5-thio-β-D-glucopyranoside compound represented by the following general structure I (p = 0 or 1; Y = -O- or -NH-; R1, R2, R3, R4 could be the same or different and = H, C2-10 acyl, C7-10 aralkyl, and C2-6 alkoxy carbonyl etc.) or pharmaceutically acceptable salts as an active component for the inhibition of sodium-dependent glucose transporter 2 (SGLT2) in the kidney are offered. The application of these compds. in the treatment of diabetes mellitus, its complication and its related diseases is discussed.

L4 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2005:423742 CAPLUS  
 DN 142:481875

11/294,932

TI Derivatives of 2-azetidinone as antihypercholesterolemic agents  
IN Sings, Heather I.; Ujjainwalla, Feroze; Maccoss, Malcolm; Myers, Robert W.  
PA Merck & Co., Inc., USA  
SO PCT Int. Appl., 58 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

|      | PATENT NO.  | KIND | DATE     | APPLICATION NO.  | DATE     |
|------|---|------|----------|------------------|----------|
| PI   | WO 2005044256   | A1   | 20050519 | WO 2004-US35845  | 20041027 |
|      | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                  |          |
|      | RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                  |          |
|      | AU 2004286838   | A1   | 20050519 | AU 2004-286838   | 20041027 |
|      | CA 2543943  | A1   | 20050519 | CA 2004-2543943  | 20041027 |
|      | EP 1682117  | A1   | 20050726 | EP 2004-796665   | 20041027 |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK   |      |          |                  |          |
|      | CN 1870988  | A    | 20061129 | CN 2004-80031555 | 20041027 |
| PRAI | US 2003-515842P   | P    | 20031030 |                  |          |
|      | WO 2004-US35845   | W    | 20041027 |                  |          |
| OS   | MARPAT 142:481875   |      |          |                  |          |
| GI   |   |      |          |                  |          |



AB The present invention provides 2-azetidinone derivs., such as I [Ar<sub>1</sub>, Ar<sub>2</sub> = aryl, R<sub>4</sub>-substituted aryl; X, Y, Z = CH<sub>2</sub>, CH(C<sub>1</sub>-6alkyl), C(C<sub>1</sub>-6alkyl)<sub>2</sub>; R = OR<sub>6</sub>, OCOR<sub>6</sub>, OCO<sub>2</sub>R<sub>6</sub>, OCONR<sub>6</sub>R<sub>7</sub>, sugar residue; R<sub>1</sub> = H, alkyl, aryl; RR<sub>1</sub> = oxo; R<sub>2</sub> = OR<sub>6</sub>, OCOR<sub>6</sub>, OCO<sub>2</sub>R<sub>6</sub>, OCONR<sub>6</sub>R<sub>7</sub>; R<sub>3</sub> = H, alkyl, aryl; R<sub>2</sub>R<sub>3</sub> = oxo; q, r, t = 0 - 1; m, n, p = 0 - 4; R<sub>4</sub> = OR<sub>6</sub>, OCOR<sub>6</sub>, OCO<sub>2</sub>R<sub>6</sub>, OCONR<sub>6</sub>R<sub>7</sub>, COR<sub>6</sub>, CONR<sub>6</sub>R<sub>7</sub>, SO<sub>2</sub>NR<sub>6</sub>R<sub>7</sub>, F; R<sub>5</sub> = R<sub>10</sub>-R<sub>11</sub>, R<sub>12</sub>-R<sub>13</sub>, OCF<sub>3</sub>, NR<sub>6</sub>R<sub>7</sub>, F; R<sub>6</sub>, R<sub>7</sub> = alkyl, aryl, aryl-substituted aryl; R<sub>10</sub>, R<sub>12</sub> = S, SO, SO<sub>2</sub>, etc.; R<sub>11</sub> = sugar, di-sugar, tri-sugar, tetra-sugar residue; R<sub>13</sub> = thiasugar, fluoro-sugar; R<sub>17</sub> = H, OH, halo, alkyl, O-alkyl, CF<sub>3</sub>, CN, NR<sub>6</sub>R<sub>7</sub>], and the pharmaceutically acceptable salts and esters thereof, for their use as antihypercholesterolemic agents. The 2-azetidinone derivs. I are useful for lowering plasma cholesterol levels, particularly LDL cholesterol, and for treating and preventing atherosclerosis and atherosclerotic disease events.

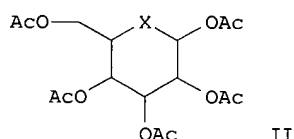
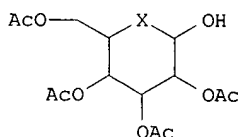
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2004:1059367 CAPLUS  
DN 142:38476  
TI Process for producing aldohexopyranose intermediate  
IN Kakinuma, Hiroyuki; Sato, Masakazu; Asanuma, Hajime; Tomisawa, Kazuyuki  
PA Taiho Pharmaceutical Co., Ltd., Japan  
SO PCT Int. Appl., 22 pp.  
CODEN: PIXXD2  
DT Patent  
LA Japanese  
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

McIntosh

PI WO 2004106352 A1 20041209 WO 2004-JP7556 20040526  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,  
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,  
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
 SN, TD, TG  
 PRAI JP 2003-151753 A 20030529  
 OS CASREACT 142:38476; MARPAT 142:38476  
 GI



AB A process for producing a tetra-O-acetylaldohexopyranose represented by the formula (I) (Ac = acetyl; X = O, S; R1 = H, C1-6 alkyl; R2 = C1-6 alkyl, halo-C1-6 alkyl, hydroxy-C1-6 alkyl; or R1 and R2 are bonded to each other and represent, in cooperation with the hydrazine group, optionally substituted N-aminopyrrolidine, N-aminopiperidine, N-aminomorpholine, or N-aminopiperazine, or N-aminoperhydroazepine; R3 = C1-6 alkyl) comprises reacting a penta-O-acetylaldohexopyranose represented by the following formula (II) with a mixture of a hydrazine compound represented by R1R2NNH2 and an organic acid represented by R3COOH to selectively remove an acetyl group at the anomeric position. Thus, to a solution of 42.0 g 1,2,3,4,6-penta-O-acetyl-5-thio-D-glucopyranose in 300 mL DMF was added a mixture of 5.76 g methylhydrazine, 7.50 g AcOH, and 125 mL DMF and the resulting mixture was stirred at room temperature for 2 h, followed by adding an addnl. mixture of 0.967 g methylhydrazine, 1.26 g AcOH, and 21 mL DMF and stirring for addnl. 1 h. The reaction mixture was diluted with 40 mL EtOAc and poured into 400 mL saturated aqueous NaCl, followed by separating the organic layer, successively washing it with 0.5 M aqueous HCl and 400 mL saturated aqueous NaCl, drying over MgSO4, concentration, and purification using silica gel chromatog., 26.5 g 2,3,4,6-tetra-O-acetyl-5-thio-D-glucopyranose (70% yield).

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:872802 CAPLUS

DN 141:366420

TI Method for selective preparation of heteroaryl 5-thio-β-D-aldohexopyranoside by Mitsunobu reaction of heteroaryl alcohols with 5-thio-β-D-aldohexopyranose derivative

IN Kakinuma, Hiroyuki; Sato, Masakazu; Amada, Hideaki; Asanuma, Hajime; Tsuchiya, Yuko

PA Taisho Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 105 pp.

CODEN: PIXXD2

DT Patent

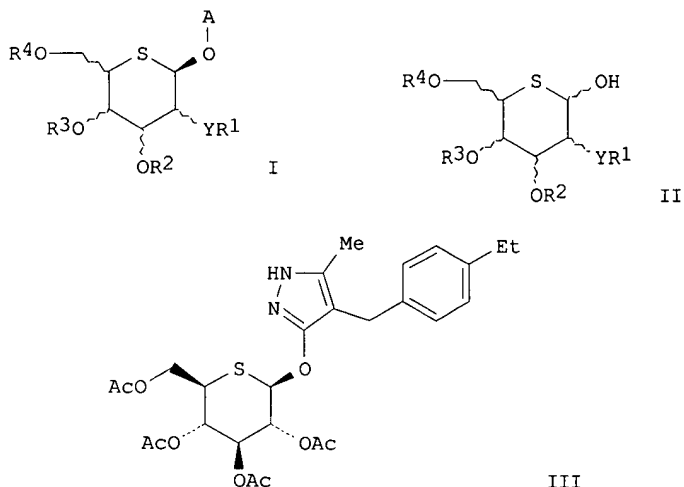
LA Japanese

FAN.CNT 2

| PATENT NO.       | KIND   | DATE     | APPLICATION NO. | DATE     |
|------------------|--|----------|-----------------|----------|
| PI WO 2004089966 | A1   | 20041021 | WO 2004-JP1244  | 20040206 |
| W:               | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |          |                 |          |
| RW:              | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,  |          |                 |          |

11/294,932

ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,  
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 CN 1761676 A 20060419 CN 2004-80007740 20040206  
 PRAI JP 2003-97838 A 20030401  
 JP 2003-404959 A 20031203  
 OS MARPAT 141:366420  
 GI



AB Disclosed is a method for preparing a heteroaryl 5-thio-β-D-aldoheptopyranoside compound of the formula (I) [wherein Y = O, NH; R1-R4 = H, C2-10 aryl, C1-6 alkyl, C7-10 aralkyl, C1-6 alkoxy-C7-10 aralkyl, allyl, tri(C1-6 alkyl)silyl, C1-6 alkoxy-C1-6 alkyl, C2-6 alkoxy-carbonyl; or when Y = O, R1 and R2 or R2 and R3 are combined together to form (un)substituted CH2; A = (un)substituted heteroaryl], which comprises reacting 5-thio-D-aldoheptopyranose compound of the formula (II) (wherein R1-R4 = same as above) with heteroaryl alc. of formula A-OH (A = same as above) in the presence of a phosphine represented by PRXRYRZ [wherein RX, RY, RZ = C1-6 alkyl, (un)substituted Ph, pyridyl, C1-6 alkyl] and an azo reagent represented by R21-N:R22 [wherein R21, R22 = C2-5 alkoxy-carbonyl, N,N-di(C1-4 alkyl)aminocarbonyl, piperidinocarbonyl]. Heteroaryl 5-thio-β-D-aldoheptopyranosides are useful as inhibitors of sodium-dependent glucose transporter 2 (SGLT2) (no data). Thus, 5.1 mmol di-Et azodicarboxylate (40% toluene solution) was added dropwise to a solution of 2,3,4,6-tetra-O-acetyl-5-thio-D-glucopyranose (937 mg, 2.6 mmol) and 1,2-dihydro-4-(4-ethylbenzyl)-5-methyl-3H-pyrazol-3-one (2.78 g, 12.9 mmol) and PPh3 (1.35 g, 5.1 mmol) in 14 mL THF at room temperature, stirred for at room temperature for 4 h, and concentrated to give, after silica gel chromatog., 20% β-D-thioglucofuranoside compound (III).

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2004:143171 CAPLUS  
 DN 140:199631

TI Preparation of aryl-5-thio-β-D-glucopyranoside derivatives as  
 remedies for diabetes

IN Sato, Masakazu; Kakinuma, Hiroyuki; Asanuma, Hajime  
 PA Taisho Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 106 pp.  
 CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 2

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|--|------|----------|-----------------|----------|
| PI WO 2004014931   | A1   | 20040219 | WO 2003-JP10160 | 20030808 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, |      |          |                 |          |

McIntosh

my app

PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,  
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
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 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

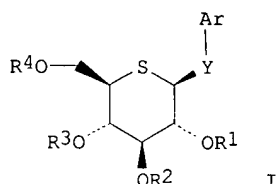
CA 2478889 A1 20040219 CA 2003-2478889 20030808  
 AU 2003254904 A1 20040225 AU 2003-254904 20030808  
 BR 2003010006 A 20050215 BR 2003-10006 20030808  
 EP 1528066 A1 20050504 EP 2003-784623 20030808

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

CN 1639180 A 20050713 CN 2003-805640 20030808  
 CN 1675233 A 20050928 CN 2003-819142 20030808  
 NZ 535229 A 20060526 NZ 2003-535229 20030808  
 JP 3813160 B2 20060823 JP 2004-527383 20030808  
 NO 2004003733 A 20041020 NO 2004-3733 20040907  
 ZA 2004007187 A 20060222 ZA 2004-7187 20040908  
 US 2005209309 A1 20050922 US 2004-518788 20041221

PRAI JP 2002-233015 A 20020809  
 JP 2003-97839 A 20030401  
 WO 2003-JP10160 W 20030808

OS MARPAT 140:199631  
 GI



AB The title compds. I [Y = O, etc.; R1 - R4 = H, acyl, etc.; Ar = aryl having substituents (further details on said substituents are given)] are prepared I are inhibitors of SGL T2 (sodium dependent glucose cotransporter 2). In an in vitro test for the inhibition of glucose uptake into brush border membrane vesicles of rat kidney, compds. of this invention showed IC50 values of 0.16  $\mu$ M to 2.4  $\mu$ M.

RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2004:143170 CAPLUS  
 DN 140:199630

TI Process for selective production of aryl 5-thio- $\beta$ -D-aldohexopyranosides

IN Sato, Masakazu; Kakinuma, Hiroyuki; Asanuma, Hajime  
 PA Taisho Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 71 pp.  
 CODEN: PIXXD2

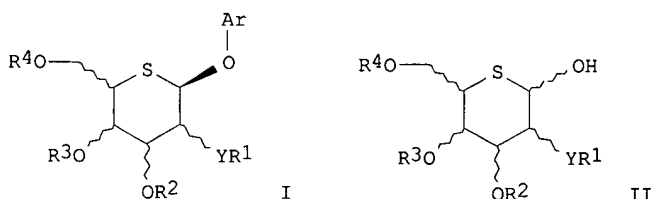
DT Patent  
 LA Japanese

FAN.CNT 2

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| PI WO 2004014930  | A1   | 20040219 | WO 2003-JP10159 | 20030808 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                 |          |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |          |
| CA 2493491  | A1   | 20040219 | CA 2003-2493491 | 20030808 |
| AU 2003254903   | A1   | 20040225 | AU 2003-254903  | 20030808 |
| EP 1541578  | A1   | 20050615 | EP 2003-784622  | 20030808 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  |      |          |                 |          |



|                      |  |
|----------------------|--|
|                      | IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK |
| CN 1639180           | A 20050713 CN 2003-805640 20030808                         |
| CN 1675233           | A 20050928 CN 2003-819142 20030808                         |
| ZA 2004007187        | A 20060222 ZA 2004-7187 20040908                           |
| US 2005256317        | A1 20051117 US 2005-521809 20050121                        |
| NO 2005000650        | A 20050304 NO 2005-650 20050207                            |
| PRAI JP 2002-233015  | A 20020809   |
| JP 2003-97839        | A 20030401   |
| WO 2003-JP10159      | W 20030808   |
| OS MARPAT 140:199630 |  |
| GI                   |  |

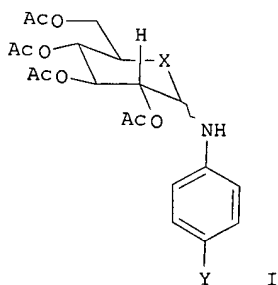


*10/5/21/2009*  
*— this is drawn to methods of making my cards. allowed same priority date*

AB This document discloses a process for the production of aryl 5-thio- $\beta$ -D-aldohecopyranoside derivative I [the wavy line indicates D isomer, L isomer, etc.; Y = O, etc.; R1 - R4 = H, acyl, etc.; Ar = (un)substituted aryl] by reacting a 5-thio-D-aldohecopyranose derivative II [R1 - R4, wavy line = as given above] with ArOH [Ar = as given above] in the presence of a phosphine and an azo reagent.

RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1999:799909 CAPLUS  
 DN 132:208052  
 TI Is There a Generalized Reverse Anomeric Effect? Substituent and Solvent Effects on the Configurational Equilibria of Neutral and Protonated N-Arylglucopyranosylamines and N-Aryl-5-thioglucopyranosylamines  
 AU Randell, Karla D.; Johnston, Blair D.; Green, David F.; Pinto, B. Mario  
 CS Département de Chemistry, Simon Fraser University, Burnaby, BC, V5A 1S6, Can.  
 SO Journal of Organic Chemistry (2000), 65(1), 220-226  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PB American Chemical Society  
 DT Journal  
 LA English  
 GI



AB The effects of substitution and solvent on the configurational equilibrium of neutral and protonated N-(4-Y-substituted-phenyl) peracetylated 5-thioglucopyranosylamines I (X = S; Y = OMe, H, CF3, NO2) (1-4) and N-(4-Y-substituted-phenyl) peracetylated glucopyranosylamines I (X = O; Y = OMe, H, NO2) (9-11) are described. The configurational equilibrium were determined by direct integration of the resonances of the individual isomers in

the <sup>1</sup>H NMR spectra after equilibration of both  $\alpha$ - and  $\beta$ -isomers. The equilibrations of the neutral compds. 1-4 in CD<sub>3</sub>OD, CD<sub>3</sub>NO<sub>2</sub>, and (CD<sub>3</sub>)<sub>2</sub>CO were achieved by HgCl<sub>2</sub> catalysis and those of the neutral compds. 9-11 in CD<sub>2</sub>Cl<sub>2</sub> and CD<sub>3</sub>OD by triflic acid catalysis. The equilibrations of the protonated compds. in both the sulfur series (solvents, CD<sub>3</sub>OD, CD<sub>3</sub>NO<sub>2</sub>, (CD<sub>3</sub>)<sub>2</sub>CO, CDCl<sub>3</sub>, and CD<sub>2</sub>Cl<sub>2</sub>) and oxygen series (solvents, CD<sub>2</sub>Cl<sub>2</sub> and CD<sub>3</sub>OD) were achieved with triflic acid. The substituent and solvent effects on the equilibrium are discussed in terms of steric and electrostatic effects and orbital interactions associated with the endo-anomeric effect. A generalized reverse anomeric effect does not exist in neutral or protonated N-aryl-5-thioglucopyranosylamines and N-arylglucopyranosylamines. The values of K<sub>eq</sub>(axial-equatorial) in protonated 1-4 increase in the order OMe < H < CF<sub>3</sub> < NO<sub>2</sub>, in agreement with the dominance of steric effects (due to the counterion) over the endo-anomeric effect. The values of K<sub>eq</sub>(axial-equatorial) in protonated 9-11 show the trend OMe > H < NO<sub>2</sub> that is explained by the balance of the endo-anomeric effect and steric effects in the individual compds.

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 1999:746389 CAPLUS  
DN 132:208047

TI Synthesis and glycosidase inhibitory activity of 5-thioglucopyranosylamines. Molecular modeling of complexes with glucoamylase

AU Randell, K. D.; Frandsen, T. P.; Stoffer, B.; Johnson, M. A.; Svensson, B.; Pinto, B. M.

CS Department of Chemistry and Institute of Molecular Biology and Biochemistry, Simon Fraser University, Burnaby, BC, Can.

SO Carbohydrate Research (1999), 321(3-4), 143-156  
CODEN: CRBRAT; ISSN: 0008-6215

PB Elsevier Science Ltd.

DT Journal

LA English

AB The synthesis of a series of 5-thio-d-glucopyranosylarylamines by reaction of 5-thio-d-glucopyranose pentaacetate with the corresponding arylamine and mercuric chloride catalyst is reported. The products were obtained as anomeric mixts. of the tetraacetates which can be separated and crystallized. The tetraacetates were deprotected to give  $\alpha/\beta$  mixts. of the parent compds. which were evaluated as inhibitors of the hydrolysis of maltose by glucoamylase G2 (GA). A transferred NOE NMR experiment with an  $\alpha/\beta$  mixture of p-methoxy-N-phenyl-5-thio-d-glucopyranosylamine in the presence of GA showed that only the  $\alpha$  isomer is bound by the enzyme. The K<sub>i</sub> values, calculated on the basis of specific binding of the  $\alpha$  isomers, are 0.47 mM for p-methoxy-N-phenyl-5-thio-d-glucopyranosylamine (I), 0.78 mM for N-phenyl-5-thio-d-glucopyranosylamine (II), 0.27 mM for p-nitro-N-phenyl-5-thio-d-glucopyranosylamine and 0.87 mM for p-trifluoromethyl-N-phenyl-5-thio-d-glucopyranosylamine, and the K<sub>m</sub> values for the substrates maltose and p-nitrophenyl  $\alpha$ -d-glucopyranoside are 1.2 and 3.7 mM, resp. Me 4-amino-4-deoxy-4-N-(5'-thio- $\alpha$ -d-glucopyranosyl)- $\alpha$ -d-glucopyranoside (III) is a competitive inhibitor of GA wild-type (K<sub>i</sub> 4  $\mu$ M) and the active site mutant Trp120 Phe GA (K<sub>i</sub> 0.12 mM). Compds. I-III are also competitive inhibitors of  $\alpha$ -glucosidase from brewer's yeast, with K<sub>i</sub> 10 mM, and 0.5 mM, resp. Mol. modeling of the inhibitors in the catalytic site of GA was used to probe the ligand-enzyme complementary interactions and to offer insight into the differences in inhibitory potencies of the ligands.

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 1997:319308 CAPLUS  
DN 127:17878

TI Relative nucleophilicity of the two sulfur atoms in 1,5-dithioglucopyranoside

AU Yuasa, Hideya; Kamata, Yujiro; Hashimoto, Hironobu

CS Faculty Bioscience Biotechnology, Tokyo Inst. Technology, Yokohama, 226, Japan

SO Angewandte Chemie, International Edition in English (1997), 36(8), 868-870  
CODEN: ACIEAY; ISSN: 0570-0833

PB VCH

DT Journal

LA English

AB Anomeric effect on the regioselective S-oxidation of thioglucopyranoside with

11/294,932

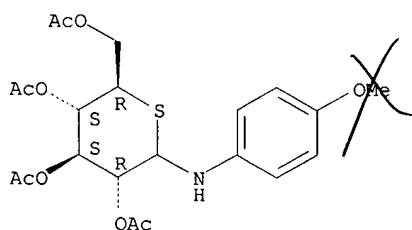
mCPBA is reported.

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib hitstr 9-11 14

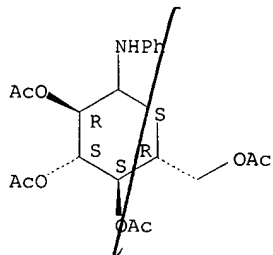
L4 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 1999:799909 CAPLUS  
DN 132:208052  
TI Is There a Generalized Reverse Anomeric Effect? Substituent and Solvent  
Effects on the Configurational Equilibria of Neutral and Protonated  
N-Arylglucopyranosylamines and N-Aryl-5-thiogluco-pyranosylamines  
AU Randell, Karla D.; Johnston, Blair D.; Green, David F.; Pinto, B. Mario  
CS Department of Chemistry, Simon Fraser University, Burnaby, BC, V5A 1S6,  
Can.  
SO Journal of Organic Chemistry (2000), 65(1), 220-226  
CODEN: JOCEAH; ISSN: 0022-3263  
PB American Chemical Society  
DT Journal  
LA English  
IT 260793-72-4 260793-73-5 260793-74-6  
260793-75-7 260793-76-8 260793-77-9  
260793-78-0 260793-80-4 260793-89-3  
260793-90-6 260793-91-7 260793-92-8  
RL: PEP (Physical, engineering or chemical process); PRP (Properties);  
PROC (Process)  
(substituent and solvent effects on the configurational equilibrium of  
neutral and protonated N-arylglucopyranosylamines and  
N-arylthiogluco-pyranosylamines)  
RN 260793-72-4 CAPLUS  
CN D-Glucopyranosylamine, N-(4-methoxyphenyl)-5-thio-, 2,3,4,6-tetraacetate  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 260793-73-5 CAPLUS  
CN D-Glucopyranosylamine, N-phenyl-5-thio-, 2,3,4,6-tetraacetate (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.

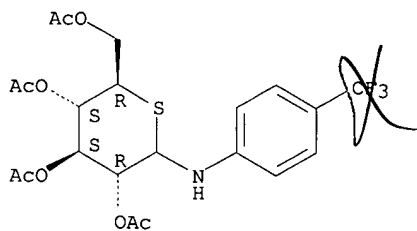


RN 260793-74-6 CAPLUS  
CN D-Glucopyranosylamine, 5-thio-N-[4-(trifluoromethyl)phenyl]-,  
2,3,4,6-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

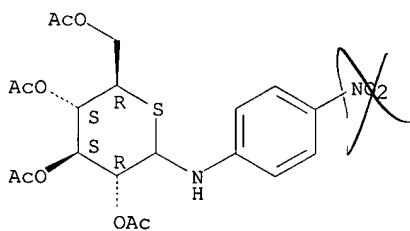
11/294,932



RN 260793-75-7 CAPLUS

CN D-Glucopyranosylamine, N-(4-nitrophenyl)-5-thio-, 2,3,4,6-tetraacetate (9CI) (CA INDEX NAME)

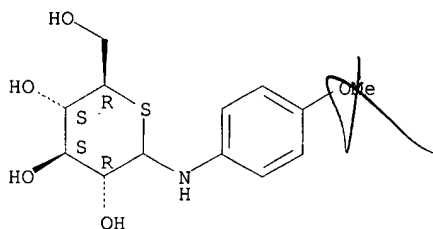
Absolute stereochemistry.



RN 260793-76-8 CAPLUS

CN D-Glucopyranosylamine, N-(4-methoxyphenyl)-5-thio- (9CI) (CA INDEX NAME)

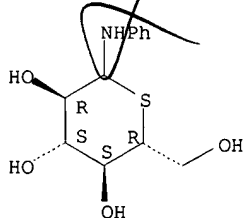
Absolute stereochemistry.



RN 260793-77-9 CAPLUS

CN D-Glucopyranosylamine, N-phenyl-5-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



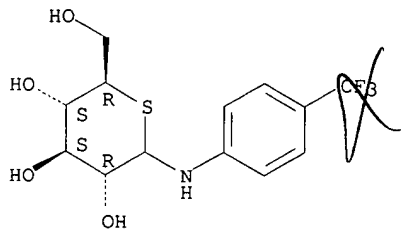
RN 260793-78-0 CAPLUS

CN D-Glucopyranosylamine, 5-thio-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

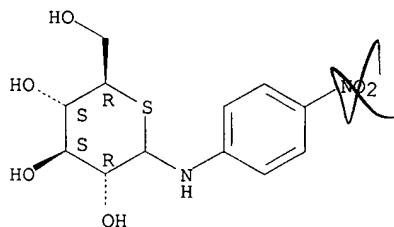
11/294,932



RN 260793-80-4 CAPLUS

CN D-Glucopyranosylamine, N-(4-nitrophenyl)-5-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 260793-89-3 CAPLUS

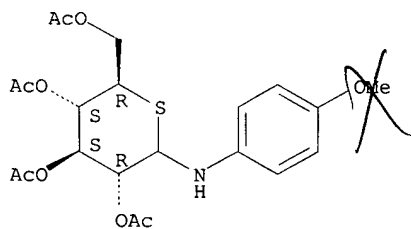
CN D-Glucopyranosylamine, N-(4-methoxyphenyl)-5-thio-, 2,3,4,6-tetraacetate, trifluoromethanesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 260793-72-4

CMF C21 H27 N O9 S

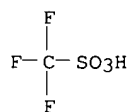
Absolute stereochemistry.



CM 2

CRN 1493-13-6

CMF C H F3 O3 S



RN 260793-90-6 CAPLUS

CN D-Glucopyranosylamine, N-phenyl-5-thio-, 2,3,4,6-tetraacetate, trifluoromethanesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

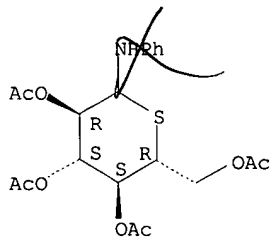
CRN 260793-73-5

CMF C20 H25 N O8 S

McIntosh

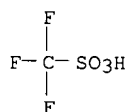
11/294,932

Absolute stereochemistry.



CM 2

CRN 1493-13-6  
CMF C H F3 O3 S

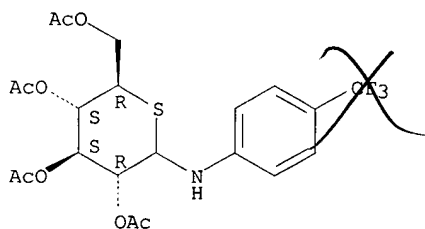


RN 260793-91-7 CAPLUS  
CN D-Glucopyranosylamine, 5-thio-N-[4-(trifluoromethyl)phenyl]-, 2,3,4,6-tetraacetate, trifluoromethanesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

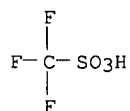
CRN 260793-74-6  
CMF C21 H24 F3 N O8 S

Absolute stereochemistry.



CM 2

CRN 1493-13-6  
CMF C H F3 O3 S



RN 260793-92-8 CAPLUS  
CN D-Glucopyranosylamine, N-(4-nitrophenyl)-5-thio-, 2,3,4,6-tetraacetate, mono(trifluoromethanesulfonate) (salt) (9CI) (CA INDEX NAME)

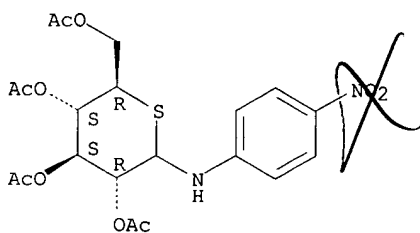
CM 1

CRN 260793-75-7  
CMF C20 H24 N2 O10 S

Absolute stereochemistry.

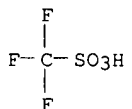
McIntosh

11/294,932



CM 2

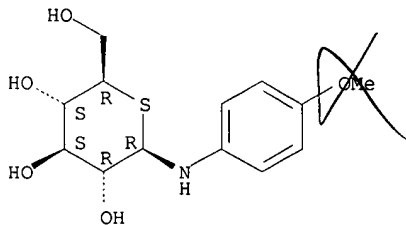
CRN 1493-13-6  
CMF C H F3 O3 S



RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 1999:746389 CAPLUS  
DN 132:208047  
TI Synthesis and glycosidase inhibitory activity of 5-thioglucopyranosylamines. Molecular modeling of complexes with glucoamylase  
AU Randell, K. D.; Frandsen, T. P.; Stoffer, B.; Johnson, M. A.; Svensson, B.; Pinto, B. M.  
CS Department of Chemistry and Institute of Molecular Biology and Biochemistry, Simon Fraser University, Burnaby, BC, Can.  
SO Carbohydrate Research (1999), 321(3-4), 143-156  
CODEN: CRBRAT; ISSN: 0008-6215  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
IT 260360-94-9P 260360-95-0P 260360-96-1P  
260360-97-2P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(synthesis and glycosidase inhibitory activity of thioglucopyranosylamines. mol. modeling of complexes with glucoamylase)  
RN 260360-94-9 CAPLUS  
CN  $\beta$ -D-Glucopyranosylamine, N-(4-methoxyphenyl)-5-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

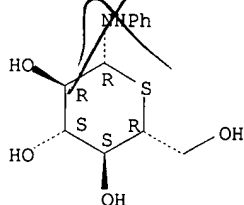


RN 260360-95-0 CAPLUS  
CN  $\beta$ -D-Glucopyranosylamine, N-phenyl-5-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

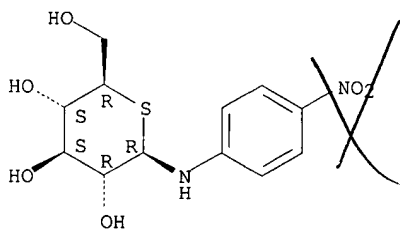
11/294,932



RN 260360-96-1 CAPLUS

CN  $\beta$ -D-Glucopyranosylamine, N-(4-nitrophenyl)-5-thio- (9CI) (CA INDEX NAME)

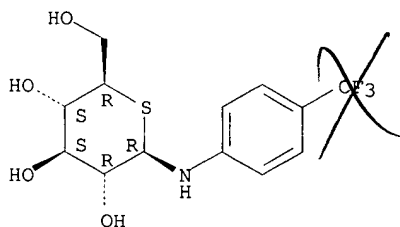
Absolute stereochemistry.



RN 260360-97-2 CAPLUS

CN  $\beta$ -D-Glucopyranosylamine, 5-thio-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 260360-86-9P 260360-87-0P 260360-88-1P

260360-89-2P 260360-90-5P 260360-91-6P

260360-92-7P 260360-93-8P

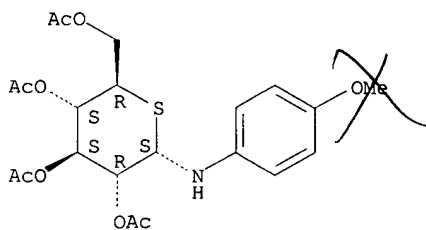
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and glycosidase inhibitory activity of thioglucopyranosylamines. mol. modeling of complexes with glucoamylase)

RN 260360-86-9 CAPLUS

CN  $\alpha$ -D-Glucopyranosylamine, N-(4-methoxyphenyl)-5-thio-, 2,3,4,6-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 260360-87-0 CAPLUS

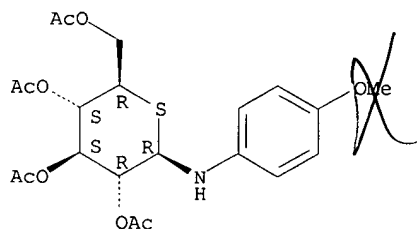
CN  $\beta$ -D-Glucopyranosylamine, N-(4-methoxyphenyl)-5-thio-, 2,3,4,6-tetraacetate (9CI) (CA INDEX NAME)

McIntosh



11/294,932

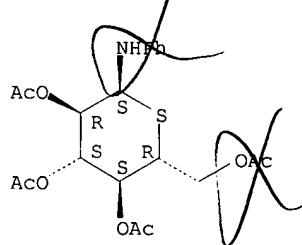
Absolute stereochemistry. Rotation (-).



RN 260360-88-1 CAPLUS

CN  $\alpha$ -D-Glucopyranosylamine, N-phenyl-5-thio-, 2,3,4,6-tetraacetate (9CI) (CA INDEX NAME)

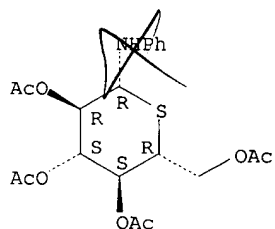
Absolute stereochemistry.



RN 260360-89-2 CAPLUS

CN  $\beta$ -D-Glucopyranosylamine, N-phenyl-5-thio-, 2,3,4,6-tetraacetate (9CI) (CA INDEX NAME)

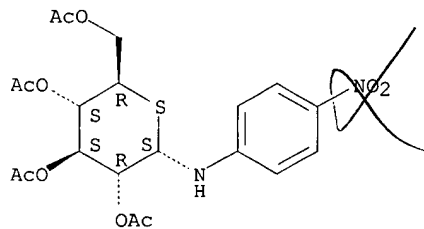
Absolute stereochemistry. Rotation (-).



RN 260360-90-5 CAPLUS

CN  $\alpha$ -D-Glucopyranosylamine, N-(4-nitrophenyl)-5-thio-, 2,3,4,6-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



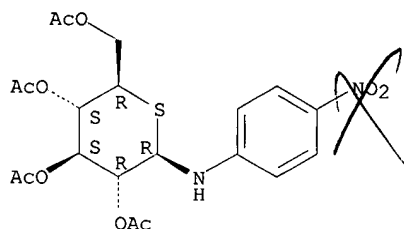
RN 260360-91-6 CAPLUS

CN  $\beta$ -D-Glucopyranosylamine, N-(4-nitrophenyl)-5-thio-, 2,3,4,6-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

McIntosh

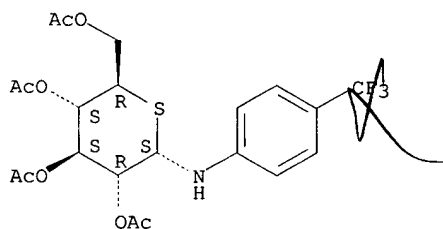
11/294,932



RN 260360-92-7 CAPLUS

CN  $\alpha$ -D-Glucopyranosylamine, 5-thio-N-[4-(trifluoromethyl)phenyl]-, 2,3,4,6-tetraacetate (9CI) (CA INDEX NAME)

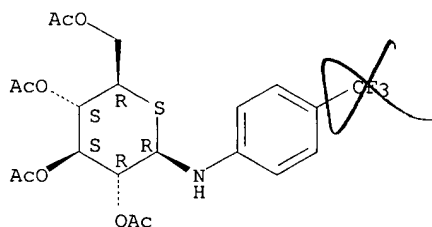
Absolute stereochemistry.



RN 260360-93-8 CAPLUS

CN  $\beta$ -D-Glucopyranosylamine, 5-thio-N-[4-(trifluoromethyl)phenyl]-, 2,3,4,6-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1997:319308 CAPLUS

DN 127:17878

TI Relative nucleophilicity of the two sulfur atoms in 1,5-dithioglucopyranoside

AU Yuasa, Hideya; Kamata, Yujiro; Hashimoto, Hironobu

CS Faculty Bioscience Biotechnology, Tokyo Inst. Technology, Yokohama, 226, Japan

SO Angewandte Chemie, International Edition in English (1997), 36(8), 868-870  
CODEN: ACIEAY; ISSN: 0570-0833

PB VCH

DT Journal

LA English

IT 190649-56-0 190649-57-1 190649-58-2

190649-59-3 190649-60-6 190649-61-7

190649-62-8 190649-63-9 190649-64-0

190649-65-1 190649-66-2 190649-67-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(relative nucleophilicity of the two sulfur atoms in  
dithioglucopyranoside during regioselective S-oxidation with mCPBA)

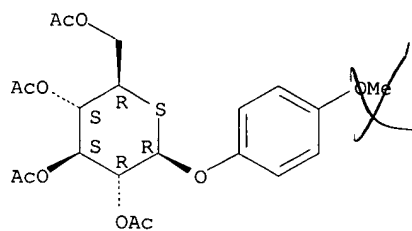
RN 190649-56-0 CAPLUS

CN  $\beta$ -D-Glucopyranoside, 4-methoxyphenyl 5-thio-, tetraacetate (9CI) (CA INDEX NAME)

McIntosh

11/294,932

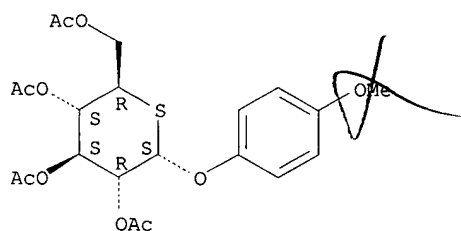
Absolute stereochemistry.



RN 190649-57-1 CAPLUS

CN  $\alpha$ -D-Glucopyranoside, 4-methoxyphenyl 5-thio-, tetraacetate (9CI)  
(CA INDEX NAME)

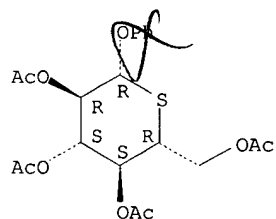
Absolute stereochemistry.



RN 190649-58-2 CAPLUS

CN  $\beta$ -D-Glucopyranoside, phenyl 5-thio-, tetraacetate (9CI) (CA INDEX  
NAME)

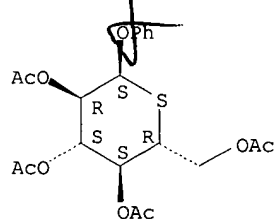
Absolute stereochemistry.



RN 190649-59-3 CAPLUS

CN  $\alpha$ -D-Glucopyranoside, phenyl 5-thio-, tetraacetate (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.



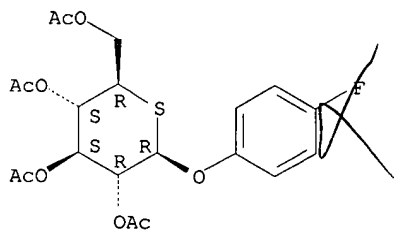
RN 190649-60-6 CAPLUS

CN  $\beta$ -D-Glucopyranoside, 4-fluorophenyl 5-thio-, tetraacetate (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.

McIntosh

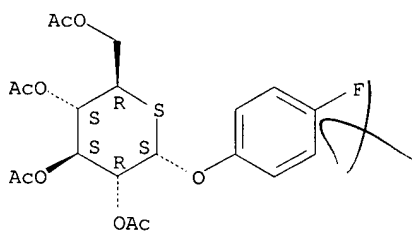
11/294,932



RN 190649-61-7 CAPLUS

CN  $\alpha$ -D-Glucopyranoside, 4-fluorophenyl 5-thio-, tetraacetate (9CI) (CA INDEX NAME)

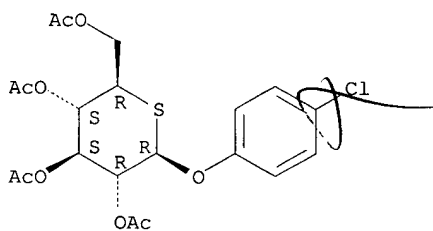
Absolute stereochemistry.



RN 190649-62-8 CAPLUS

CN  $\beta$ -D-Glucopyranoside, 4-chlorophenyl 5-thio-, tetraacetate (9CI) (CA INDEX NAME)

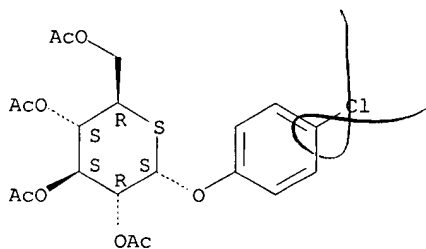
Absolute stereochemistry.



RN 190649-63-9 CAPLUS

CN  $\alpha$ -D-Glucopyranoside, 4-chlorophenyl 5-thio-, tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



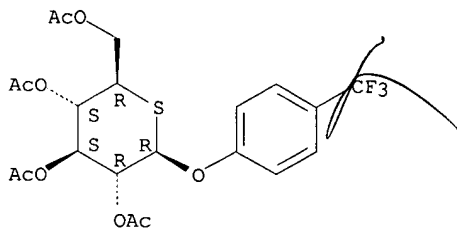
RN 190649-64-0 CAPLUS

CN  $\beta$ -D-Glucopyranoside, 4-(trifluoromethyl)phenyl 5-thio-, tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

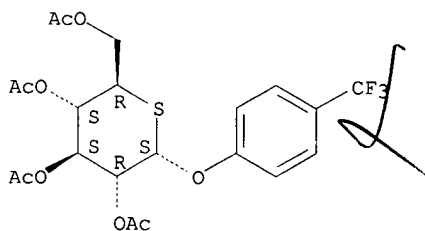
11/294,932



RN 190649-65-1 CAPLUS

CN  $\alpha$ -D-Glucopyranoside, 4-(trifluoromethyl)phenyl 5-thio-, tetraacetate  
(9CI) (CA INDEX NAME)

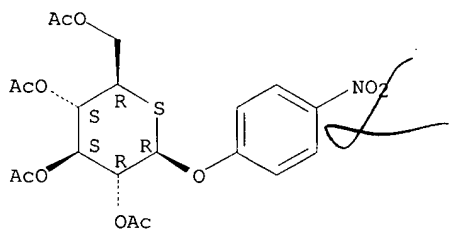
Absolute stereochemistry.



RN 190649-66-2 CAPLUS

CN  $\beta$ -D-Glucopyranoside, 4-nitrophenyl 5-thio-, 2,3,4,6-tetraacetate  
(9CI) (CA INDEX NAME)

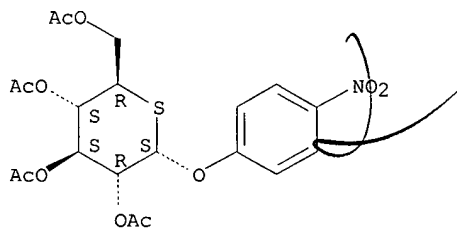
Absolute stereochemistry.



RN 190649-67-3 CAPLUS

CN  $\alpha$ -D-Glucopyranoside, 4-nitrophenyl 5-thio-, 2,3,4,6-tetraacetate  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 190649-68-4P 190649-69-5P 190649-70-8P

190649-71-9P 190649-72-0P 190649-73-1P

190649-74-2P 190649-75-3P 190649-76-4P

190649-77-5P 190649-78-6P 190649-79-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(relative nucleophilicity of the two sulfur atoms in  
dithioglucopyranoside during regioselective S-oxidation with mCPBA)

RN 190649-68-4 CAPLUS

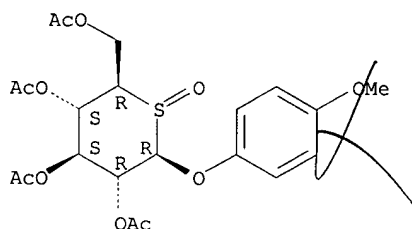
CN  $\beta$ -D-Glucopyranoside, 4-methoxyphenyl 5-thio-, 2,3,4,6-tetraacetate,

McIntosh

11/294,932

S-oxide (9CI) (CA INDEX NAME)

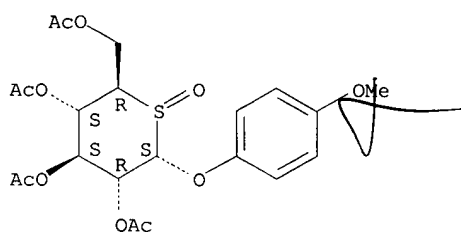
Absolute stereochemistry.



RN 190649-69-5 CAPLUS

CN  $\alpha$ -D-Glucopyranoside, 4-methoxyphenyl 5-thio-, 2,3,4,6-tetraacetate, S-oxide (9CI) (CA INDEX NAME)

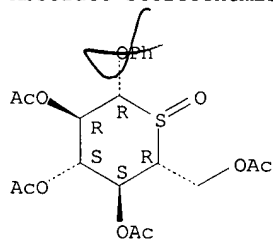
Absolute stereochemistry.



RN 190649-70-8 CAPLUS

CN  $\beta$ -D-Glucopyranoside, phenyl 5-thio-, 2,3,4,6-tetraacetate, S-oxide (9CI) (CA INDEX NAME)

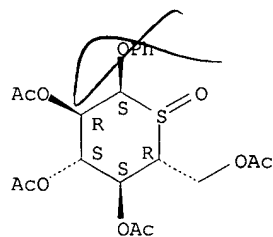
Absolute stereochemistry.



RN 190649-71-9 CAPLUS

CN  $\alpha$ -D-Glucopyranoside, phenyl 5-thio-, 2,3,4,6-tetraacetate, S-oxide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



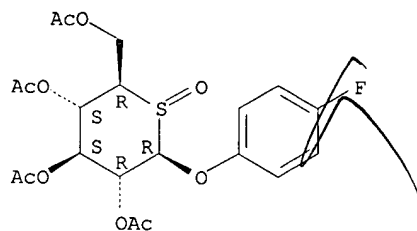
RN 190649-72-0 CAPLUS

CN  $\beta$ -D-Glucopyranoside, 4-fluorophenyl 5-thio-, 2,3,4,6-tetraacetate, S-oxide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

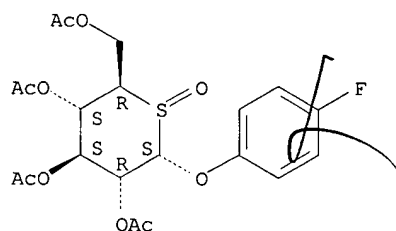
11/294,932



RN 190649-73-1 CAPLUS

CN  $\alpha$ -D-Glucopyranoside, 4-fluorophenyl 5-thio-, 2,3,4,6-tetraacetate, S-oxide (9CI) (CA INDEX NAME)

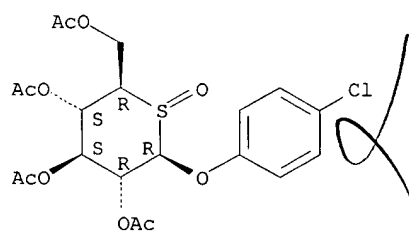
Absolute stereochemistry.



RN 190649-74-2 CAPLUS

CN  $\beta$ -D-Glucopyranoside, 4-chlorophenyl 5-thio-, 2,3,4,6-tetraacetate, S-oxide (9CI) (CA INDEX NAME)

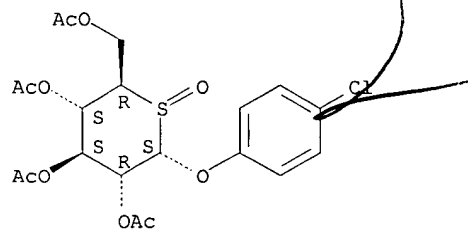
Absolute stereochemistry.



RN 190649-75-3 CAPLUS

CN  $\alpha$ -D-Glucopyranoside, 4-chlorophenyl 5-thio-, 2,3,4,6-tetraacetate, S-oxide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



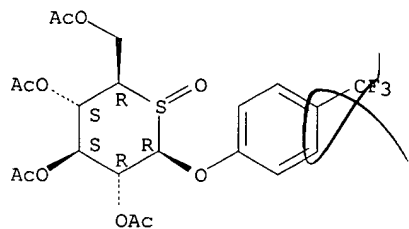
RN 190649-76-4 CAPLUS

CN  $\beta$ -D-Glucopyranoside, 4-(trifluoromethyl)phenyl 5-thio-, 2,3,4,6-tetraacetate, S-oxide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

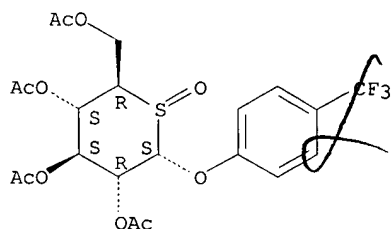
McIntosh

11/294,932



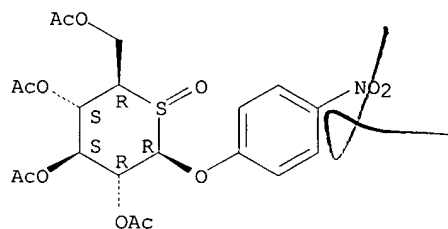
RN 190649-77-5 CAPLUS  
CN  $\alpha$ -D-Glucopyranoside, 4-(trifluoromethyl)phenyl 5-thio-,  
2,3,4,6-tetraacetate, S-oxide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



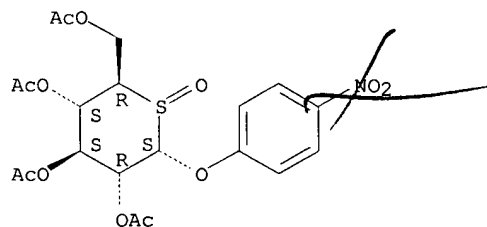
RN 190649-78-6 CAPLUS  
CN  $\beta$ -D-Glucopyranoside, 4-nitrophenyl 5-thio-, 2,3,4,6-tetraacetate,  
S-oxide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 190649-79-7 CAPLUS  
CN  $\alpha$ -D-Glucopyranoside, 4-nitrophenyl 5-thio-, 2,3,4,6-tetraacetate,  
S-oxide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

McIntosh